To: Tapia, Cecilia[Tapia.Cecilia@epa.gov]; Hammerschmidt, Ron[Hammerschmidt.Ron@epa.gov]
Cc: Brooks, Karl[brooks.karl@epa.gov]
From: Hatch, Sarah
Sent: Mon 1/13/2014 1:38:16 PM
Subject: FW: WLL Area 1 Heating Event
40056510.pdf
40241235.pdf

Hi Cecilia, Harvey asked me to forward as he had the wrong email address for you

From: Harvey Ferdman [mailto:HarveyFerdman@aol.com]
Sent: Monday, January 13, 2014 12:18 AM
To: Brooks, Karl; Tappia.Cecilia@epa.gov; Hatch, Sarah
Cc: Bill.Otto@house.mo.gov; MOMcNeil,Margo; Christopher.Nagel@dnr.mo.gov; Shawn.Muenks@dnr.mo.gov; MATT LAVANCHY; Todd.Thalhamer@CalRecycle.ca.gov; Kerry_DeGregorio@Blunt.Senate.gov; Joeana_Middleton@McCaskill.Senate.Gov; Douglas Clemens; 'Terrie Boguski'
Subject: WLL Area 1 Heating Event

Karl,

Thank you for your interest in the research our community has been doing regarding the West Lake and Bridgeton Landfills.

In our last conversation, you requested that I forward any information I was able to assemble regarding hazards of leaving PVC liners in the boring holes in Area 1 during the work that is scheduled to begin this week.

Please review the following.

Item 1: Boring showing elevated sub-surface temperature in Area 1.

Item 2: Email statement from a recognized landfill expert who has been consulting on the SSE in the Bridgeton Landfill in which he raises cautions about leaving the PVC liners in place.

Item 3: Documented presence of petroleum soaked soils and possible “shock sensitive” materials in Area 1.

I continue to be concerned about the PVC pipes providing a possible oxygen paths in Area 1. I believe this information supports my concern. I look forward to your reply.

Item 1:

On the last state and local officials update conference call, you mentioned that a key reason you were OK with leaving the PVC pipes in place is because you were told that there have never been any high temperature readings in Area 1. I'm sorry this may contradict the information you were told and I hope you find the following data helpful. This is from pdf page 22 of the attached report 40056510.pdf. It shows a temperature of 140 degrees at 56 feet deep in Area 1 boring logs. According to our first responders who have been studying landfill fires and sub-surface events and their management, any reading over 131 degrees at depth is considered a possible sub-surface smolder event and merits further testing and monitoring. I have also inquired to our citizen researchers regarding their claim that there was a fire in the proximity of this well after the boring sample was taken that apparently reached the surface before being controlled by pouring a slurry into the area. I will forward documentation on that event as soon as I am able to confirm it. In the meantime, I hope you and your team find this information useful.

Soil Boring Log				McLaren Hart
Boring No. WL-110	Project No./Name 07.0803035.003.002			Page: 2 of 2
Start/Finish Date 9/6/95	Site Name and Location West Lake Landfill; Bridgeton, Missouri			
Drilling Contractor Drilling Service Company	Boring Location: Area 1 Ground Surface Elevation: 484.41 (Planned Boring location, not surveyed) Northing: 1068889.01 Easting: 516645.03			
Driller Bruce Murphy				
Drilling Equipment LDH-80T Drilling Rig, Large Diameter Auger		McLaren/Hart Geologist/Office Tim Biggs / St. Louis		
Bit Size/Type 24" OD, Solid Auger	Sample Method Grab from Augers	T.D. Borehole 56'	Well Installed? None Installed	
Remarks:				

Depth (ft)	Sample ID #	Geiger Reading (mR/hr)	Description
55	WL-110 55'	Background (0.02-0.04)	50.0-56.0' Native Alluvium: dark gray, clayey silt; moist; very warm. @ 56.0' sample had a temperature of 140° F
60	WL-110 56'	Background (0.02-0.04)	Boring terminated at 56.0'

Item 2:

From: Todd Thalhamer

Date:01/09/2014 3:38 PM (GMT-06:00)

To: MATT LAVANCHY

Subject: RE: Fwd: WLL Trench Piping Issue

Matt,

Sorry for the delayed response, my kids gave me a nasty bug that I am now just coming out to

see the world again.

While the methods the landfill are proposing are acceptable, you are correct with the potential outcome. These pipes can be direct conduits to an sse. I have seen these types of investigative methods add to problems over time. My questions are

1. Given the potential for an sse, would one want to you use steel piping?

2. Past maintenance issues have shown the lf is unstable in areas, what type of seal is going to be place are the pipe and how will it be maintained.?

3.Will the piping be added to an weekly inspection list?

4. Will the piping be protected from equipment?

5. One has to maintain these pipes and ensure they don't become a pathway for oxygen.

Sent from my T-Mobile 4G LTE Device

-------- Original message --------
From: MATT LAVANCHY
Date:01/08/2014 4:27 PM (GMT-08:00)
To: Todd Thalhamer
Cc: TERRY LOEHRER
Subject: Fwd: WLL Trench Piping Issue

Todd, not sure if this was sent to you already but I think your expert opinion in this should be heard. My opinion would just be an opinion, but allowing a means for oxygen to be drawn into that part of the landfill will only support the combustion process of any sse that makes its way there.

Matt

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------

From: Harvey Ferdman

Date:01/08/2014 4:38 PM (GMT-06:00)

To: MATT LAVANCHY ,Todd.Thalhamer@CalRecycle.ca.gov

Subject: WLL Trench Piping Issue

Matt and Todd,

Todd, I mentioned this issue to Matt and he asked me to send this email:

On a briefing conference call today by the EPA, they said that the next phase of building a barrier in Area 1 at West Lake Landfill is to do core sampling using a sonic drill. The holes left from the drilling are going to be fitted with PVC piping and a removable cap so they can access them in the future if needed. The deepest they expect to go is 80 feet..

My question and concern is: is it safe to leave multiple pipe paths deep into this dump that can potentially allow oxygen infiltration? I asked the EPA if a dump expert had reviewed this part of the plan, and, after a lot of dancing, the answer was effectively a no, as they did not see any reason for the concern that I raised. My fear is that someone in the future (or some natural act, like a tornado, earthquake, or animal) may damage a cap or two and open up a pathway for oxygen to make it deep within this dump and start a smolder event or fire, and the potential for odor releases.

Should I be concerned about this?

Item 3:

In the presence of petroleum soaked soil, can this start an SSE during the construction of the Isolation Barrier?

Note: Page 18 of document 40241235.pdf – VII Waste related information:

Waste Characteristics check-marked are: 2. Ignitable 3. Radioactive 5. Toxic and page 19 - Item 5 - Incompatible Wastes and presence of flammable and **"shock sensitive"** materials

Document 40056510:

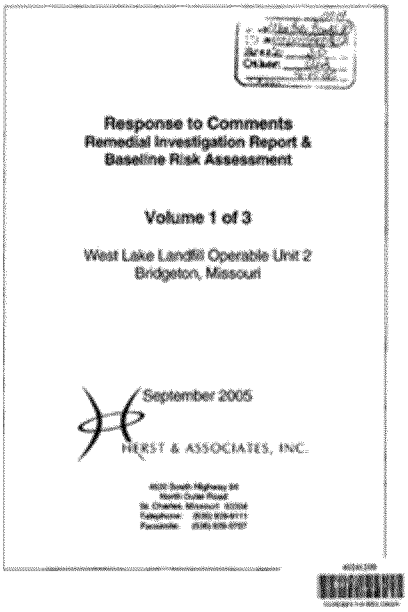
1. Area 1 Boring Hole Samples

a. WL-101 at 5 ft discolored with petroleum odor OVM readings >10x background

b. Many other borings show similar presence of petroleum

Note: Page 18 – VII Waste related information: **Waste Characteristics check-marked are: 2. Ignitable 3. Radioactive 5. Toxic and page 19 - Item 5 - Incompatible Wastes**

2. Area 1 – An underground diesel tank is located beneath the asphalt paved area in the west portion of Area 1. The tank is no longer in use but has not be removed because it is within the boundaries of Area 1 and has leaked into the surrounding area – another tank leaked prior to removal in 1993 resulting in "floating product thickness as high as 3.7 feet has been observed" according to the following document:



Response to Comments
Remedial Investigation Report &
Baseline Risk Assessment

Volume 1 of 3

West Lake Landfill Operable Unit 2
Bridgeton, Missouri

September 2005

HERST & ASSOCIATES, INC.

Harvey Ferdman

Policy Advisor to

Missouri State Representative Bill Otto, District 70

St. Louis, MO 63017

314-469-0595

314-761-5100 (cell)